TDI | Texas Department of Insurance

PO Box 12030 | Austin, TX 78711 | 800-578-4677 | tdi.texas.gov

Product Evaluation

DR1234 | 0422

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at 800-248-6032.

Evaluation ID: DR-1234

Effective Date: April 1, 2022
Re-evaluation Date: April 2026

Product Name: 2-1/4" Ultimate Aluminum Clad Wood Outswing Stationary Doors, French Doors G2, Sidelites G2, and Side Hinged Doors G2, Impact Resistant

Manufacturer: Marvin
P.O. Box 100
Highway 11 West
Warroad, MN 56763
(218) 386-4021

General Description:

System	Description	Label Rating	Design Pressure Rating
1	Ultimate Clad Wood Outswing Fixed/Stationary Door; O	LC-PG65 (43.43 x 98) Missile Level D	+65 / -65 psf
2	Ultimate Clad Wood Outswing French Door Sidelite, G2; O	LC-PG65 (43.43 x 98) Missile Level D	+65 / -65 psf
3	Ultimate Clad Wood Outswing Fixed/Stationary French Door; G2; O	LC-PG65 (43.43 x 122) Missile Level D	+65 / -65 psf
4	Ultimate Clad Wood Outswing French Door Sidelite; G2; O	LC-PG65 (43.43 x 122) Missile Level D	+65 / -65 psf

General Description:

System	Description	Label Rating	Design Pressure Rating
5	Ultimate Clad Wood Outswing Door; XX	LC-PG65 (72.6 x 98) Missile Level D	+65 / -65 psf
6	Ultimate Clad Wood Outswing French Door; G2; XX	LC-PG65 (84.62 x 98) Missile Level D	+65 / -65 psf
7	Ultimate Clad Wood Outswing French Door; G2; XX	LC-PG65 (72.6 x 122) Missile Level D	+65 / -65 psf

Product Dimensions:

System	Overall Size	Panel Size
1-2	43-7/16" x 98"	41-1/16" x 95-1/8"
3-4	43-7/16" x 122"	41-1/16" x 119-1/8"
5	72-5/8" x 98"	35-1/16" x 95-1/8"
6	84-5/8" x 98"	41-1/16" x 95-1/8"
7	72-5/8" x 122"	35-1/16" x 119-1/8"

Components and Hardware:

Systems 1-4: No hardware required

Systems 5-6:

- **Hinges:** Three required per jamb; secure to the door panel with four (4) No. 10 x 1-1/2" screws and to the door jamb with five (5) No. 10 x 1" screws.
- **Multipoint lock with deadbolt (2-point):** One required; located on the locking stile
- **Passive lock box:** One required; located on the locking stile of the passive panel
- **Sill strike:** Two required; located at the center of the sill; secured with five No. 10 x 3" screws
- **Header strike and retainer:** Two required; located at the center of the head; secured with two No. 10 x 3" screws.
- **Strike plate panel:** One required; located on the passive panel

System 7:

- **Hinges:** Five required per jamb; secure to the door panel with four (4) No. 10 x 1-1/2" screws and to the door jamb with five (5) No. 10 x 1" screws.
- **Multipoint lock with deadbolt:** One required; located on the locking stile
- **Passive lock box:** One required; located on the locking stile of the passive panel
- **Shoot bolts:** Four required
- **Sill strike:** Two required; located at the center of the sill; secured with five No. 10 x 3" screws
- **Header strike and retainer:** Two required; located at the center of the head; secured with two No. 10 x 3" screws.
- **Strike plate panel:** One required; located on the passive panel

Product Identification (Certification Label on Door):

System		
1, 5	Certification agency	WDMA
	Manufacturer's name or code name	Marvin
	Product name	UL OSW DR 2.25 IZ3
	Test standards	AAMA/WDMA/CSA 101/I.S.2/A440-11,17 ASTM E1886-13a/E1996-17 Missile Level D
2	Certification agency	WDMA
	Manufacturer's name or code name	Marvin
	Product name	UL OSW DR 2.25 G2 IZ3
	Test standards	AAMA/WDMA/CSA 101/I.S.2/A440-11,17 ASTM E1886-13a/E1996-17 Missile Level D
3, 6-7	Certification agency	WDMA
	Manufacturer's name or code name	Marvin
	Product name	UL OSW FR DR 2.25 G2 IZ3
	Test standards	AAMA/WDMA/CSA 101/I.S.2/A440-11,17 ASTM E1886-13a/E1996-17 Missile Level D
4	Certification agency	WDMA
	Manufacturer's name or code name	Marvin
	Product name	UL OSW FR DR 2.25 SL G2 IZ3
	Test standards	AAMA/WDMA/CSA 101/I.S.2/A440-11,17 ASTM E1886-13a/E1996-17 Missile Level D

Impact Resistance:

System	Impact Resistant	Requirement
1-7	Yes	These products satisfy TDI's criteria for protection from windborne debris. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

Installation:

Systems 1-2:

Option 1: The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with structural brackets (1.238" x 0.969" x 0.125" aluminum). Secure the brackets to the door with two No. 8 x 5/8" screws and to the wall framing with two No. 8 screws. Locate the brackets approximately 6" from each corner and 15" on center along the side jambs, and 6" from each corner along the head. The sill is secured with No. 8 x 1-1/2" screws located 4" from each corner and 15" on center. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Option 2: The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with No. 8 x 3" screws. Locate the screws approximately 6" from each corner and 15" on center along the side jambs, and 6" from each corner along the head. The sill is secured with No. 8 x 1-1/2" screws located 4" from each corner and 15" on center. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Systems 3-4:

Option 1: The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with structural brackets (1.238" x 0.969" x 0.125" aluminum). Secure the brackets to the door with two No. 8 x 5/8" screws and to the wall framing with two No. 8 screws. Locate the brackets approximately 6" from each corner and 15" on center along the head and side jambs. The sill is secured with No. 8 x 1-1/2" screws located 4" from each corner and 15" on center. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Option 2: The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with No. 8 x 3" screws. Locate the screws approximately 6" from each corner and 15" on center along the head and side jambs. The sill is secured with No. 8 x 1-1/2" screws located 4" from each corner and 15" on center. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Systems 5-7

Option 1: The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with No. 8 x 3" screws. Locate the screws approximately 6" from each corner and 15" on center along the head and side jambs. The sill is secured to the wall framing with No. 8 x 1-1/2" screws located approximately 4" from each corner and spaced 15" on center. Two No. 10 x 3" screws through each strike at the head. Two No. 10 x 2-1/2" screws through each hinge. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Option 2: The wood wall framing members must be minimum Spruce-Pine-Fir dimension lumber. The door assembly is secured to the wall framing with structural brackets (1.238" x 0.969" x 0.125" aluminum). Secure the brackets to the door with two No. 8 x 5/8" screws and to the wall framing

with two No. 8 screws. Locate the brackets approximately 6" from each corner and 15" on center along the head and side jambs. The sill is secured with No. 8 x 1-1/2" screws located 4" from each corner and 15" on center. Two No. 10 x 3" screws through each strike at the head. Two No. 10 x 2-1/2" screws through each hinge. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the wall framing members.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.